



chain nodes :

10 11 12 14

ring nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

1-12 6-14 7-10 7-11

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9

exact/norm bonds :

2-7 3-9 6-14 7-8 8-9

exact bonds :

1-12 7-10 7-11

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

G1:H,CH3,Et,n-Pr

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 14:CLASS

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:631456 CAPLUS
 DN 146:347333
 TI Novel liquid-crystal materials with negative dielectric anisotropy for TV application
 AU Bremer, Matthias; Klasen-Memmer, Melanic; Pauluth, Detlef; Tarumi, Kazuaki
 CS Liquid Crystal Division, Merck KGaA, Darmstadt, D-64293, Germany
 SO Journal of the Society for Information Display (2006), 14(6), 517-521
 CODEN: JSIDE8; ISSN: 1071-0922
 URL: <http://scitation.aip.org/getpdf/servlet/GetPDFServlet?filetype=pdf&id=JSIDE8000001400000600005170000001&idtype=cvips>
 PB Society for Information Display
 DT Journal; (online computer file)
 LA English
 RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:371350 CAPLUS
 DN 142:420229
 TI Liquid crystal medium containing fluorinated indane compounds
 IN Klasen-Memmer, Melanie; Lietzau, Lars; Bremer, Matthias
 PA Merck Patent GmbH, Germany
 SO PCT Int. Appl., 58 pp.
 CODEN: PIXXD2
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005037957	A1	20050428	WO 2004-EP10648	20040922
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1673418	A1	20060628	EP 2004-786989	20040922
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1867647	A	20061122	CN 2004-80030235	20040922
JP 2007510010	T	20070419	JP 2006-534625	20040922
DE 102004046103	A1	20050519	DE 2004-102004046103	20040923
US 2007080324	A1	20070412	US 2006-575969	20060414
PRAI DE 2003-10349148	A	20031017		
WO 2004-EP10648	W	20040922		

OS MARPAT 142:420229
 RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:31730 CAPLUS
 DN 142:306352
 TI 1,1,6,7-Tetrafluoroindanes: improved liquid crystals for LCD-TV application
 AU Bremer, Matthias; Lietzau, Lars
 CS Division of Liquid Crystals, R&D Chemistry Section, Merck KGaA, Darmstadt, D-64271, Germany
 SO New Journal of Chemistry (2005), 29(1), 72-74

CODEN: NJCHE5; ISSN: 1144-0546

PB Royal Society of Chemistry

DT Journal

LA English

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:791393 CAPLUS

DN 139:314577

TI Fluorinated indenenes and 1,7-dihydroindacenes having negative dielectric anisotropy for use in liquid crystal media

IN Leitzau, Lars; Klasen-Memmer, Melanie; Bremer, Matthias

PA Merck Patent G.m.b.H., Germany

SO Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1350780	A1	20031008	EP 2003-4926	20030307
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	DE 10214938	A1	20031016	DE 2002-10214938	20020404
	US 2003222243	A1	20031204	US 2003-406569	20030404
	US 7182885	B2	20070227		
	JP 2004155755	A	20040603	JP 2003-101050	20030404
PRAI	DE 2002-10214938	A	20020404		

OS MARPAT 139:314577

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:74059 CAPLUS

DN 138:145162

TI Indane compound with negative dielectric anisotropy for VA (vertical align) type liquid crystal display

IN Bremer, Matthias; Heckmeier, Michael; Reiffenrath, Volker

PA Merck Patent GmbH, Germany

SO Ger. Offen., 20 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10135499	A1	20030130	DE 2001-10135499	20010720
	TW 243810	B	20051121	TW 2002-91116042	20020718
	WO 2003010120	A1	20030206	WO 2002-EP8085	20020719
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002331274	A1	20030217	AU 2002-331274	20020719
	EP 1409441	A1	20040421	EP 2002-767236	20020719
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				

CN 1507427	A	20040623	CN 2002-809390	20020719
JP 2004536140	T	20041202	JP 2003-515482	20020719
US 2004171866	A1	20040902	US 2004-484193	20040120
US 7122228	B2	20061017		
PRAI DE 2001-10135499	A	20010720		
WO 2002-EP8085	W	20020719		
OS MARPAT 138:145162				